Workgroup: Technical Infrastructure Workgroup

Meeting Date: January 25, 2010   9:30am-12:00pm

Location: ACHI Executive Conference Room

Agenda Items:	
1. Welcome and Introductions	
2. Roundtable (continued from January 15, 2010 meeting)	
3. Meaningful Use Criteria (Dr. David Matthews)	
4. Work Plan Review	
5. Landscape Assessment Questions	
6. Alternative Architecture Discussion	

Discussion Highlights:

The workgroup meeting began with introductions of those present and connecting via tele-conference and video-conference, providing their names and representation. Each person was reminded to use the in-kind tracking sign-in sheet.

Roundtable Discussion of HIE Landscape (continued from the January 15, 2010 meeting): During the previous meeting, each person was asked to provide a brief summary of their individual agency's participation in the HIE process or any existing projects taking place in the area of HIE, HIT or EMR. Members who were unable to provide this information on January 15th were afforded the opportunity to do so today.

Brett Tracy, Community Health Centers of Arkansas, Inc., Data/Policy/Legislative Analyst: There are 12 Community Health Centers in the state of Arkansas. Of the 12 centers, six have implemented EHR software and the remaining six will implement EHR software within the next year.

Kari Cassel, UAMS/Arkansas Hospital CIO, CIO: UAMS, Arkansas Children's Hospital and Saline Memorial Hospital currently use Mirth, an open-source, in-patient EMR software that will be capable of meeting Meaningful Use standards in the near future. UAMS is also adapting their out-patient EMR software, Logician, to meet Meaningful Use standards in an effort to implement a full EMR system. Additionally, UAMS has developed an open-source image repository that contains various file types that they are able to share with other facilities. Kari is working with Patrick Neece of Jefferson Regional Medical Center (JRMC) on a proof of concept model using Mirth and they will attempt test transactions this week. These transactions will occur via a virtual server,--a cost effective component of the system. Although there are fees associated with system support, the software is free and it does not limit the type of data/image that users can exchange.

Bill Rodgers, Office of Rural Health and Primary Care, Director: Bill works with smaller, rural providers, some of whom are willing and able to pursue EMR

technology. Other providers are less willing or able to incorporate EMR into their practices.

Meaningful Use Criteria (Dr. David Matthews): Dr. Matthews summarized his understanding of the Meaningful Use criteria in a PowerPoint presentation, *Stage 1 Meaningful Use: What is Available for Technical Infrastructure Guidance Today?* and solicited feedback from workgroup members. He addressed the following topics:

- Emerging Standards
    - Dr. Matthews anticipated a faster exchange of data than the standards require
- What is in Stage 1 for TI Group?
    - Criteria doesn't explain how to built our system
- EMR Objectives
    - Need to actively promote Computerized Physician Order Entry (CPOE) (required) over the next 24 months and actively discourage the adoption of EMR without CPOE
- Public Health Goals
    - Must perform one test of each task and public health system must be able to send and receive information in order to be considered "successful"
- Care Coordination Objectives
    - We have the time to perform the one, required test correctly by 2013—this includes the exchange of report images and structured data. Benefits of testing later include the potential availability of more criteria in 2012, increased likelihood of successful test, etc. However, Kari Cassel posed the question of cost effectiveness (in terms of reimbursement) if testing occurred in 2011.
- Lessons from Stage 1 Criteria
    - No guidelines exist today, but we should continue planning a successful system for Arkansas and adapt it to meet ONC standards as they become available
- TI Conclusions
    - Opportunity to enter a new, innovative phase—we should explore why past models have been unsuccessful
- How to Proceed
    - Incremental growth: exchanging public health information→reportable diseases→immunizations→access Medicaid information. A wealth of Medicaid information exists, but is not readily accessible—need to investigate what information is not available and negotiate agreements about sharing that information. According to Jerry Bradshaw (Arkansas Blue Cross and Blue Shield), machine to machine data sharing exists, but portals have yet to be developed. He encouraged members to review Florida's plan.

Dr. Matthews concluded with the notion that Phase 1 doesn't require Arkansas to spend large sums of money. This phase allows us to observe the actions of other states as they develop their systems and also affords us the time to explore Mirth's scalability.

Work Plan Review (Dewey Freeman): Dewey Freeman briefly reviewed the Technical Infrastructure Workgroup Work Plan (lines 298—309):

ID	❶	Task Name	Duration	Start	Finish	% Complete	Predeces	Resource Initials
1		**Planning**	23 days?	Mon 11/16/09	Wed 12/16/09	21%		
99		**Governance Work Group (GWG)**	94 days?	Fri 11/20/09	Wed 3/31/10	21%		
226		**Finance Work Group (FWG)**	122 days?	Fri 11/20/09	Mon 5/10/10	0%		
295		**Technical Infrastructure Work Group (TIWG)**	103 days?	Fri 11/20/09	Tue 4/13/10	0%		
296	▦	TIWG activities start	0 days	Fri 1/15/10	Fri 1/15/10	0%		
297		**Support landscape assessments**	17 days	Fri 1/15/10	Mon 2/8/10	0%	296	
298		**Provide TI survey questions for AR lands**	9 days	Fri 1/15/10	Wed 1/27/10	0%		
299		Draft	6 days	Fri 1/15/10	Fri 1/22/10	0%		DF
300		Review	1 day	Mon 1/25/10	Mon 1/25/10	0%	299	TIWG
301		Revise	2 days	Tue 1/26/10	Wed 1/27/10	0%	300	DF
302		**Provide TI survey questions for HIT progr**	8 days	Fri 1/15/10	Tue 1/26/10	0%		
303		Draft	6 days	Fri 1/15/10	Fri 1/22/10	0%		DF
304		Review	1 day	Mon 1/25/10	Mon 1/25/10	0%	303	TIWG
305		Revise	1 day	Tue 1/26/10	Tue 1/26/10	0%	304	DF
306		**Provide TI reqts for RFI**	17 days	Fri 1/15/10	Mon 2/8/10	0%		
307		Draft	15 days	Fri 1/15/10	Thu 2/4/10	0%		DF
308		Review	1 day	Fri 2/5/10	Fri 2/5/10	0%	307	TIWG
309		Revise	1 day	Mon 2/8/10	Mon 2/8/10	0%	308	DF

Landscape Assessment Questions: Dewey Freeman also reviewed the landscape assessment questions that the workgroup has been tasked to develop. These questions will be sent to health care providers and are intended to assess the HIE landscape within Arkansas. These questions include:

- Type of health care entity?
- Location?
- Ownership/organizational structure?
- EMR installed and in use? Source/vendor?
- Standards-based (e.g. HL7, etc.)?
- Service: internal, vendor-hosted, shared service?
- Clinical functions supported?
- Sharing information? Private network, internet? Email to patients? ePrescribing?
- Connectivity (broadband, dial-up, LAN)?
- Other functions supported? Claims, AR, etc.?

Dewey solicited feedback from the workgroup members, who proposed these additional questions:

- Beyond health care providers, who should be included in the landscape survey?
  - Health Center Control Network (a key stakeholder from the Beacon Communities)
  - Arkansas two year colleges, including Arkansas Tech, a college that is producing graduates with four year degrees in HIE tech training
  - The Beacon Communities
    - Jefferson Regional Medical Center (SE Arkansas—Patrick Neece)
    - Arkansas Foundation for Medical Care (NE Arkansas—Jonathan Fuchs)
    - UAMS (NW Arkansas—Peter Koehler)
- How are users utilizing EMR? What are their system's capabilities/what do they plan to deploy? Brett Tracy suggested that members visit http://www.docsite.com/ for more information about clinical data repositories.
- Perhaps we need to develop separate questions for Public Health?
- Are providers sending out quality measures?

Alternative Architecture Discussion: The meeting closed with the workgroup's discussion of alternative architecture models. Dewey Freeman presented five different models to the workgroup and opened the floor for member's comments regarding the features, strengths and limitations of each model. These models included:

- Distributed Media Model (*potential to serve as a sub-system within a chosen model*)
- Peer-to-Peer Model with Variations
- Record Locator Service Model
- Centralized Warehouse Model
- Hybrid Models

After reviewing each model, Dr. Matthews asked the workgroup to eliminate models that didn't warrant further consideration. Members decided to eliminate the Centralized Warehouse Model and the Peer-to-Peer Model from the list of options. The Centralized Warehouse Model raised concerns about data management, data validity, privacy and security issues, and cost effectiveness. The Peer-to-Peer Model is limited by its significant dependence on a network and its lack of scalability.

Workgroup members agreed to seriously examine the features of the hybrid models as well as the open-source Mirth software used by UAMS.

Assignments:

Task(s)	Assigned Member(s)	Completion Date	Reporting Method
Return in-kind value rates forms	All members	February 5, 2010	Email/hard copy
Revise TI Survey questions for AR Landscape	Dewey Freeman	February 5 , 2010	Email/hard copy
Revise TI Survey questions for HIT	Dewey Freeman	February 5, 2010	Email/hard copy
Provide requirements for RFI	All members	February 11, 2010	Via email

Dependencies:
Business and Technical Operations workgroup – groups have to stay collaborative and coordinated in their activities
Concerns about data normalization and standardization
Meaningful use requirements

Completed Tasks:
Reviewed HIO options

Next Steps: Activities defined for next meeting
Review revised draft of HIE design principles and requirements